

# THERMELT 817 Natural

## POLYAMIDE HOT MELT RESIN

### KEY FEATURES

- Specialties
- Standard molding resins
- Flammability UL94 : VO (UL file E116659)

### DESCRIPTION

THERMELT 817 natural is a pure copolymer polyamide hot melt resin, non reactive and solvent free, specially designed for Low Pressure Molding applications.

### APPLICATIONS

THERMELT 817 is mainly used for molding of electronic/electric components, connectors and cables.

### SPECIFICATIONS

PHYSICAL PROPERTIES	VALUE	STANDARD TEST
<b>Viscosity Brookfield</b> (205°C, SC4, 50 RPM) [Pa.s]	0.4-0.8	ASTM D3236
<b>Softening point</b> [°C]	163-173	ASTM D3461
<b>Water Content</b> [%]	< 0.2	Bostik
<b>Commercial shape</b>	Pellets / Sticks	
<b>Packaging</b>	20Kg bag / 16Kg cardboard	

### INDICATIVE VALUE

THERMAL PROPERTIES	VALUE	STANDARD TEST
<b>Vicat temperature</b> (A 120, 10N, 120°C/h) [°C]	45	ISO306
<b>Glass transition</b> (DSC) [°C]	- 10	Bostik
MECHANICAL PROPERTIES	VALUE	STANDARD TEST
<b>Yield strength</b> (50 mm/min, 23°C) [MPa]	5.3	ISO 527
<b>Strength at break</b> (50 mm/min, 23°C) [MPa]	3.5	ISO 527
<b>Elongation at break</b> (50 mm/min, 23°C) [%]	90	ISO 527
<b>Young modulus</b> (50 mm/min, 23°C) [MPa]	100	ISO 527



### INDICATIVE VALUE

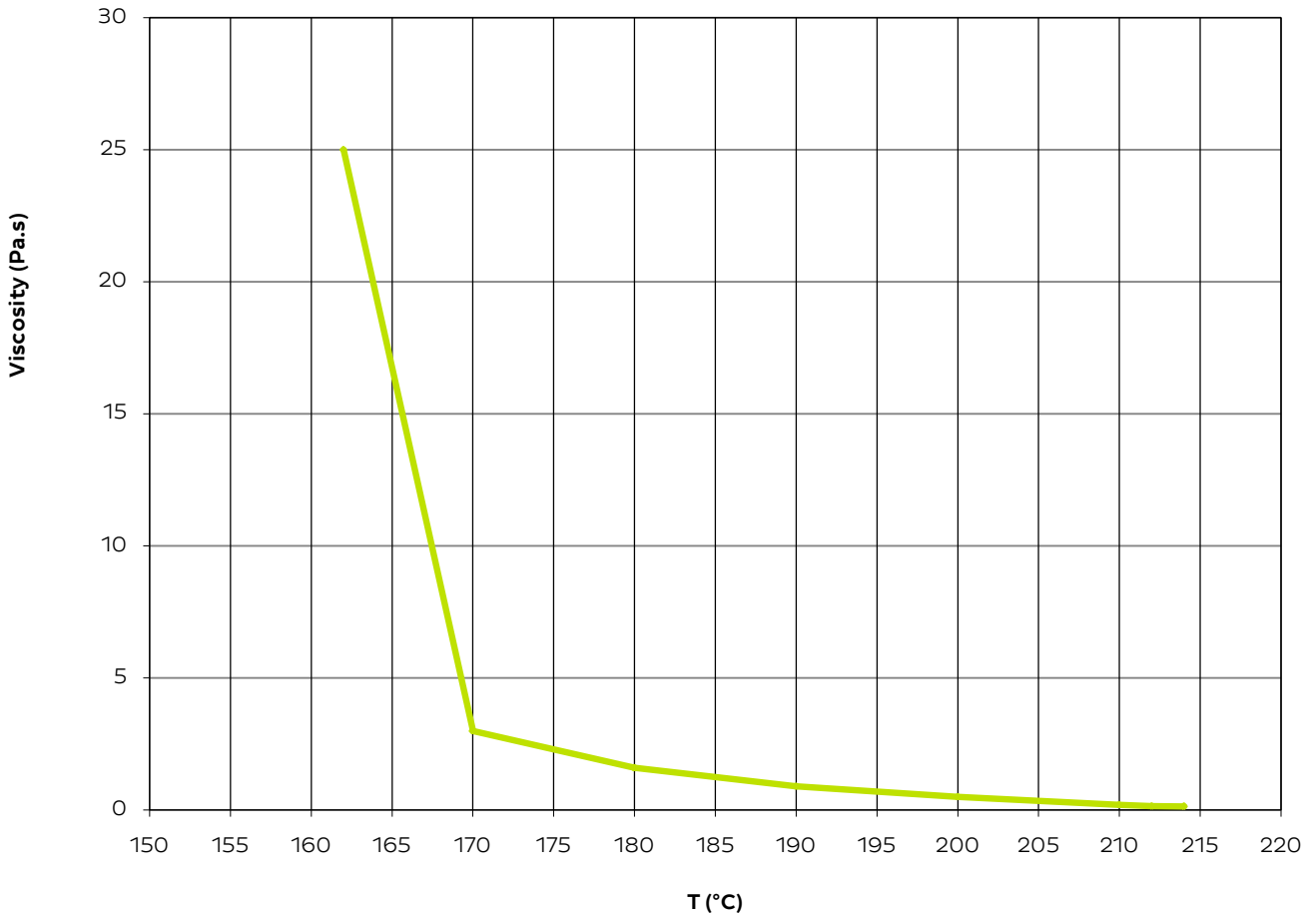
MISCELLANEOUS PROPERTIES	VALUE	STANDARD TEST
<b>Density</b>	~1	Internal test
<b>Water absorption</b> (immersed, 23°C) [%]	1.3	ISO 62
<b>Hardness</b> [Shore D] (23°C)	49	ISO 868
ELECTRICAL PROPERTIES	VALUE	STANDARD TEST
<b>Transversal resistivity</b> [Ω.cm] (500V)	1,1.10 <sup>12</sup>	IEC 60093
<b>Dielectric rigidity</b> [kV.mm <sup>-1</sup> ] (23°C)	18	IEC 60243-1
<b>Relative permittivity</b> [F.m <sup>-1</sup> ] (50Hz, 23°C)	7.9	IEC 60250

### PROCESSING CONDITIONS

RECOMMENDED PARAMETERS	VALUE
<b>Melt Temperature Range</b> [°C]	180-210
<b>Mold Temperature Range</b> [°C]	20-60
<b>Drying Time</b> (Air oven, thin layer) [h]	8
<b>Drying Temperature</b> [°C]	70
<b>Processing Moisture Content</b> [%]	< 0.2

THERMELT 817 can be used in both melter and extruder.

## Viscosity curve versus temperature



### STORAGE STABILITY

The product has a shelf life of 18 months when properly stored in a cool and dry location in closed original packing. Thermelt 817 will absorb moisture from the air. Because of risk of moisture absorption, we highly recommend to store any open bag in a close container.

### REGULATION

No substance mentioned in the candidate list of SVHC for authorization published by the European Chemical Agency (16/12/2013), is present at a concentration higher than 0,1% (w/w).

We certify that our products comply with the European directive 2011/65/EU, also called the RoHS directive. We don't introduce intentionally phthalate derivatives or Phosphorus Elemental (CAS 7723-14-0) in the manufacturing of our Polyamide adhesives.

MSDS is available on [www.quick-fds.com](http://www.quick-fds.com)

The information given and recommendations made herein are based on Bostik's research only and are not guaranteed to be accurate. The performance of the product, its shelf life, and application characteristics will depend on many variables, including the kind of materials to which the product will be applied, the environment in which the product is stored or applied, and the equipment used for application. Any change in any of these variables can affect the product's performance. It is the buyer's obligation, prior to using the product, to test the suitability of the product for an intended use under the conditions that will exist at the time of the intended use. Bostik does not warrant the product's suitability for any particular application. The product is sold pursuant to Bostik's Terms and Conditions of Sale that accompanies the product at the time of sale. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute permission, inducement, or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### SMART HELP

Please contact your local representative

